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Reviewer: markspencer

Timestamp: [year=2009; month=6; day=12; hr=11; min=44; sec=41; ms=579;]

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Application No: 10533781 Version No: 2.0

Input Set:**Output Set:**

Started: 2009-06-08 13:25:20.957
Finished: 2009-06-08 13:25:24.466
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 509 ms
Total Warnings: 29
Total Errors: 0
No. of SeqIDs Defined: 30
Actual SeqID Count: 30

Error code	Error Description
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W 402	Undefined organism found in <213> in SEQ ID (3)
W 402	Undefined organism found in <213> in SEQ ID (4)
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W 402	Undefined organism found in <213> in SEQ ID (10)
W 402	Undefined organism found in <213> in SEQ ID (11)
W 402	Undefined organism found in <213> in SEQ ID (12)
W 402	Undefined organism found in <213> in SEQ ID (13)
W 402	Undefined organism found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
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W 213	Artificial or Unknown found in <213> in SEQ ID (19)
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Input Set:

Output Set:

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Total Warnings: 29
Total Errors: 0
No. of SeqIDs Defined: 30
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Error code	Error Description
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W 213	Artificial or Unknown found in <213> in SEQ ID (28)
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<110> Barsova, Ekaterina V.

LUKYANOV, SERGEY ANATOLIEVICH

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SPECIES AND METHODS FOR USING SAME

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<141> 2009-06-08

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<151> 2002-12-26

<150> 60/459,679

<151> 2003-04-02

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<151> 2003-11-26

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<212> DNA

<213> Pontellina plumata

<400> 1

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<212> PRT

<213> Pontellina plumata

<400> 2

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 35           40           45
Pro Tyr Leu Leu Ser His Val Met Gly Tyr Gly Phe Tyr His Phe Gly
 50           55           60
Thr Tyr Pro Ser Gly Tyr Glu Asn Pro Phe Leu His Ala Ala Asn Asn
 65           70           75           80
Gly Gly Tyr Thr Asn Thr Arg Ile Glu Lys Tyr Glu Asp Gly Gly Val
 85           90           95
Leu His Val Ser Phe Ser Tyr Arg Tyr Glu Ala Gly Arg Val Ile Gly
100           105           110
Asp Phe Lys Val Val Gly Thr Gly Phe Pro Glu Asp Ser Val Ile Phe
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Val Glu Tyr Gln His Ala Phe Lys Thr Pro Thr Ala Phe Ala
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<210> 3

<211> 1010

<212> DNA

<213> Pontellina plumata

<400> 3

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ctcctgagca gggacgtatg accaacaaga tgaagtctac caagggcgcc ttgaccttct 180
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tcaccgacaa gatcatccgg tccaatgcta ccgtggagca cttgcacca atgggagaca 480
acgttcttgt gggctccttc gcgagaacct tttccctgag ggatggaggc tactactcat 540
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 <213> Pontellina plumata

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 35 40 45
 Pro Tyr Leu Leu Ser His Val Met Gly Tyr Gly Phe Tyr His Phe Gly
 50 55 60
 Thr Tyr Pro Ser Gly Tyr Glu Asn Pro Phe Leu His Ala Ile Asn Asn
 65 70 75 80
 Gly Gly Tyr Thr Asn Thr Arg Ile Glu Lys Tyr Glu Asp Gly Gly Val
 85 90 95
 Leu His Val Ser Phe Ser Tyr Arg Tyr Glu Ala Gly Arg Val Ile Gly
 100 105 110
 Asp Phe Lys Val Val Gly Thr Gly Phe Pro Glu Asp Ser Val Ile Phe
 115 120 125
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 130 135 140
 Met Gly Asp Asn Val Leu Val Gly Ser Phe Ala Arg Thr Phe Ser Leu
 145 150 155 160
 Arg Asp Gly Gly Tyr Tyr Ser Phe Val Val Asp Ser His Met His Phe
 165 170 175
 Lys Ser Ala Ile His Pro Ser Ile Leu Gln Asn Gly Gly Pro Met Phe
 180 185 190
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 210 215 220

<210> 5
 <211> 814
 <212> DNA
 <213> Labidocera aestiva

<400> 5
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 gatggaaaca ctgatgaagg acgtatgacc aacaagatga agtccaccaa aggacctctc 180
 tccttctctc cctacctact ctcccacatc atgggctacg gattctatca ctatgctacc 240
 ttccctgctg gatatgagaa tgtctacctc catgctgcta agaattggagg ctacaccaac 300
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 gagggaaaca aggttatcgg agacttcaag gttgttgat caggattccc agctaacagt 420
 gttatcttca ctgacaagat catcaagtcc aacccaacct gtgagcacat ctacccaag 480
 ggagataata ttcttgtcaa tgctacact cgaacttgga tgctgagaga tgggtggatac 540
 tactctgcac aggtcaacaa tcatctccac ttcaagactg ccatgcatcc caccatgctc 600
 cagaacggag gatccatgtt tacctacagg aagggttgagg agctccacag ccagtcagat 660
 gttggtattg tagaatacca acatgtcttc aagaccccaa ctgcttttgc ctaagcttgg 720
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 <212> PRT
 <213> Labidocera aestiva

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 35 40 45
 Pro Tyr Leu Leu Ser His Ile Met Gly Tyr Gly Phe Tyr His Tyr Ala
 50 55 60
 Thr Phe Pro Ala Gly Tyr Glu Asn Val Tyr Leu His Ala Ala Lys Asn
 65 70 75 80
 Gly Gly Tyr Thr Asn Thr Arg Thr Glu Arg Tyr Glu Asp Gly Gly Ile
 85 90 95
 Ile Ser Val Asn Phe Thr Tyr Arg Tyr Glu Gly Asn Lys Val Ile Gly
 100 105 110
 Asp Phe Lys Val Val Gly Ser Gly Phe Pro Ala Asn Ser Val Ile Phe
 115 120 125
 Thr Asp Lys Ile Ile Lys Ser Asn Pro Thr Cys Glu His Ile Tyr Pro
 130 135 140
 Lys Gly Asp Asn Ile Leu Val Asn Ala Tyr Thr Arg Thr Trp Met Leu
 145 150 155 160
 Arg Asp Gly Gly Tyr Tyr Ser Ala Gln Val Asn Asn His Leu His Phe
 165 170 175
 Lys Thr Ala Met His Pro Thr Met Leu Gln Asn Gly Gly Ser Met Phe
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 195 200 205
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<210> 7
 <211> 753
 <212> DNA
 <213> cf. Pontella meadi Wheeler

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 atacagatga gggacgcatg accaacaataa tgaagtccat caaaggacct atctccttct 180
 ctccctacct cctctcccac attcttggtc acggatatta ccactttgca accttccttg 240
 ctggatatga aaatatctac cttcatgcc aagaagaatgg aggttactcc aatgtcagaa 300
 ctgagaggta tgaggatgga ggcacattt ctataacctt caactacaga tatgaaggga 360
 acaagatcat tggagacttc aaggttggtg gaacaggatt ccctaccaac agtcttatct 420
 tcaactgacaa gatcattaaa tccaacccta cctgtgagaa catgttcccc aaggctgaca 480
 atactcttgt gaatgcctac accagaacat atttgettta agatggtgga tactactctg 540
 cccagggttaa caaccatatg cacttcaaga gtgccatcca taccaccatg ctccagaatg 600
 gcggatccat gttcacctac agagttgtag aggagacaca cactcagaac gaagttgcta 660
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<210> 8

<211> 222
 <212> PRT
 <213> cf. *Pontella meadi* Wheeler

<400> 8

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			20					25					30		
Arg	Met	Thr	Asn	Lys	Met	Lys	Ser	Ile	Lys	Gly	Pro	Ile	Ser	Phe	Ser
			35					40					45		
Pro	Tyr	Leu	Leu	Ser	His	Ile	Leu	Gly	Tyr	Gly	Tyr	Tyr	His	Phe	Ala
			50				55						60		
Thr	Phe	Pro	Ala	Gly	Tyr	Glu	Asn	Ile	Tyr	Leu	His	Ala	Met	Lys	Asn
65					70					75					80
Gly	Gly	Tyr	Ser	Asn	Val	Arg	Thr	Glu	Arg	Tyr	Glu	Asp	Gly	Gly	Ile
				85					90					95	
Ile	Ser	Ile	Thr	Phe	Asn	Tyr	Arg	Tyr	Glu	Gly	Asn	Lys	Ile	Ile	Gly
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Asp	Phe	Lys	Val	Val	Gly	Thr	Gly	Phe	Pro	Thr	Asn	Ser	Leu	Ile	Phe
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			130				135					140			
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145					150					155					160
Lys	Asp	Gly	Gly	Tyr	Tyr	Ser	Ala	Gln	Val	Asn	Asn	His	Met	His	Phe
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Thr	Tyr	Arg	Val	Val	Glu	Glu	Thr	His	Thr	Gln	Asn	Glu	Val	Ala	Ile
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<210> 9
 <211> 880
 <212> DNA
 <213> cf. *Pontella meadi* Wheeler

<400> 9

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t a a a t a c a g a	g c g g a a g c a c	g g t g a t c a t c	a g t t c c t c a g	t a a a c g a g t a	g a g a c a c a c a	120
t c a a a a t g c c	t g a c a t g a a g	c t t g a g t g c c	a c a t c t c c g g	a a c c a t g a a t	g g a g a g g a g t	180
t t g a a c t t a t	t g g t t c t g g a	g a t g g a a a t a	c t g a t c a g g g	a c g c a t g a c a	a a c a a t a t g a	240
a g t c c a t c a a	a g g a c c t c t c	t c c t t c t c t c	c c t a c c t a c t	c t c c c a c a t t	c t t g g c t a t g	300
g a t a t t a c c a	c t t t g c a a c c	t t c c c t g c t g	g a t a t g a a a a	t a t c t a c c t t	c a t g c c a t g a	360
a g a a t g g a g g	t t a c t c a a a t	g t c a g g a c t g	a g a g g t a t g a	g g a t g g a g g c	a t c a t t t c t a	420
t a a c c t t c a a	c t a c a g a t a t	g a a g g c a g c a	a g a t c a t t g g	a g a c t t c a a a	g t t a t t g g a a	480
c a g g a t t c c c	t a c c g a c a g t	c t t a t c t t c a	c t g a c a a g a t	c a t t a a a t c c	a a c c c t a c c t	540
g c g a g a a c a t	g t t c c c c a a g	g c t g a c a a c a	t t c t t g t g a a	t g c c t a c a c c	a g a a c c t a t t	600
t g c t t a a a g a	t g g t g g a t a c	t a c t c t g c c c	a g g t t a a c a a	c c a t a t g c a c	t t c a a g a g t g	660
c c a t c c a t c c	t a c a a t g c t c	c a g a a t g g t g	g a t c c a t g t t	c a c t c a c a g a	g t a g t a g a g g	720
a g a a c c a c a c	t a a g a c c a a c	g t t g c t a t c g	t a g a g t a c c a	a a a t g t c t t c	a a a a c t c c t a	780
c t g c a t t t g c	t t a a a a t a c t	t g t a a c a a a a	c t g c a a a g a a	a t a a c c t a t a	t t g t a c a a t a	840
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 <213> cf. *Pontella meadi* Wheeler

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 35 40 45
 Pro Tyr Leu Leu Ser His Ile Leu Gly Tyr Gly Tyr Tyr His Phe Ala
 50 55 60
 Thr Phe Pro Ala Gly Tyr Glu Asn Ile Tyr Leu His Ala Met Lys Asn
 65 70 75 80
 Gly Gly Tyr Ser Asn Val Arg Thr Glu Arg Tyr Glu Asp Gly Gly Ile
 85 90 95
 Ile Ser Ile Thr Phe Asn Tyr Arg Tyr Glu Gly Ser Lys Ile Ile Gly
 100 105 110
 Asp Phe Lys Val Ile Gly Thr Gly Phe Pro Thr Asp Ser Leu Ile Phe
 115 120 125
 Thr Asp Lys Ile Ile Lys Ser Asn Pro Thr Cys Glu Asn Met Phe Pro
 130 135 140
 Lys Ala Asp Asn Ile Leu Val Asn Ala Tyr Thr Arg Thr Tyr Leu Leu
 145 150 155 160
 Lys Asp Gly Gly Tyr Tyr Ser Ala Gln Val Asn Asn His Met His Phe
 165 170 175
 Lys Ser Ala Ile His Pro Thr Met Leu Gln Asn Gly Gly Ser Met Phe
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 195 200 205
 Val Glu Tyr Gln Asn Val Phe Lys Thr Pro Thr Ala Phe Ala
 210 215 220

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 <211> 847
 <212> DNA
 <213> *Pontella mediterranea*

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 aagtccacca agggacctct ttccttctct ccttatttgc tctccacgt tcttggttat 240
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 aagaatggag gttactccaa cacaagaact gagaggatg aggatggagg tatcatttct 360
 gctaccttca actacagata tgaagggaga cagattcatg gagacttcaa ggttgtagga 420
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 gagctccaca cacaactga agtcggtatt gttgaatacc agcatgtctt caagaggcca 720
 actgcttttg cttaattttg taaataaaga aagaatctat aatgcaatag taccttaaag 780
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<211> 222

<212> PRT

<213> Pontella mediterranea

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			20					25					30		
Arg	Met	Thr	Asn	Lys	Met	Lys	Ser	Thr	Lys	Gly	Pro	Leu	Ser	Phe	Ser
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Pro	Tyr	Leu	Leu	Ser	His	Val	Leu	Gly	Tyr	Gly	Tyr	Tyr	His	Tyr	Ala
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Thr	Phe	Pro	Ala	Gly	Tyr	Glu	Asn	Val	Tyr	Leu	His	Ala	Met	Lys	Asn
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Gly	Gly	Tyr	Ser	Asn	Thr	Arg	Thr	Glu	Arg	Tyr	Glu	Asp	Gly	Gly	Ile
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Ile	Ser	Ala	Thr	Phe	Asn	Tyr	Arg	Tyr	Glu	Gly	Arg	Gln	Ile	His	Gly
			100						105				110		
Asp	Phe	Lys	Val	Val	Gly	Thr	Gly	Phe	Pro	Ala	Asp	Se			